

Leading by Example Council Meeting

September 15, 2016

Agenda



- **Welcome & Introductions (11:00 – 11:10)**
 - Opening Remarks from DOER Commissioner Judith Judson
- **General Updates**
- **Solar Updates**
- **Pollinator Updates**
- **LBE Updates**
- **LBE Outreach Materials Review**
- **Events & Next Meeting**

General Updates

Energy Legislation: *An Act Relative to Energy Diversity*

- Requires utilities to competitively solicit and contract for approx. **1,200 MW of clean energy generation**– base load hydropower, onshore wind and solar
- Targets procurement of approx. **1,600MW of offshore wind**
- Authorizes **use of energy storage technologies** paired w/ renewables
 - Authorizes DOER to set storage target for 2020
- Establishes a **commercial Property Assessed Clean Energy (PACE) program**



Gov. Baker signs bill August 8
([Flickr](#))

MA Record Energy Savings



- Record Energy Savings for 2013-2015 Three-Year Efficiency Plan
- **Electric:**
 - Savings Goal: 2.5% ➡ Actual: 3.01%
- **Natural Gas:**
 - Savings Goal: 1.12% ➡ Actual: 1.23%
- The current Three-Year Plan (2016-2018), approved by the DPU in January, set savings goals of 2.94% of electric sales and 1.24% of gas sales

New Statewide Grant Programs

Capturing Franchise Energy Savings (CaFES) Grant Program

- DOER is CaFES Program that will demonstrate innovative delivery methods of energy efficiency technologies using a franchise model.
 - For gas stations, convenience stores, and others
 - Will provide financial support to franchise parent companies to implement EE in franchisee stores located in Municipal Light Plant (MLP) territories
-

Peak Demand Management Grant

- This Grant Program will provide financial support to entities to test theories of impact on peak demand reduction.
- The goal is to demonstrate cost-effective strategies for reducing summer and/or winter peak demand, plus the potential for demand reduction to defer energy infrastructure investments.

APS Regulations

- Establishing incentives for renewable thermal technologies
- Public hearings held
- Comments on draft regs received and in process of review
- Stay tuned for next iteration of regulations

Green Communities META Grants

- Municipal Energy Technical Assistance Grants
- \$518,645 awarded to 75 municipalities, water, and school districts
- Grant awards up to \$12,500 per muni
- Funding supports ‘consultants and contractors to assist with a diverse array of local energy projects.’

[Press release and full list of recipients](#)

Supreme Judicial Court Energy Decisions

- **May 2016:** Kain et. al. v. MassDEP
 - Regulation-setting requirements to limit GHG emissions not met
 - MassDEP to 'promulgate regulations that address multiple sources or categories of sources of greenhouse gas emissions'
- **August 2016:** ENGIE GAS & LNG LLC v. Department of Public Utilities
 - Electric ratepayers not allowed to be charged for/subsidize costs of new natural gas pipelines
 - Other options for pipeline financing being considered

Electric Vehicles

- Chevy Bolt Range
 - 238 miles on a single electric charge
 - Available late 2016
 - Sticker Price: \$37,500
- Tesla Model 3 Range
 - 215 miles on a single electric charge
 - Available late 2017
 - Sticker price: \$35,000



Solar Updates

SREC II

- Eligibility deadline for project completion of January 8, 2017
- 4 month extension allowed for projects with 50% of construction costs expended
- Final guidelines posted [here](#) for:
 - Construction Timeline Extension Guideline
 - Defines “construction costs”, eligibility and documentation requirements
 - Revised SREC Factor Guideline
 - approximately 20% lower for each market sector

New Solar Incentive Program – Public Hearing

- DOER has spent the past few months working on the development of the next solar incentive program
- Public meeting scheduled to share the straw proposal for the program design with all interested stakeholders:

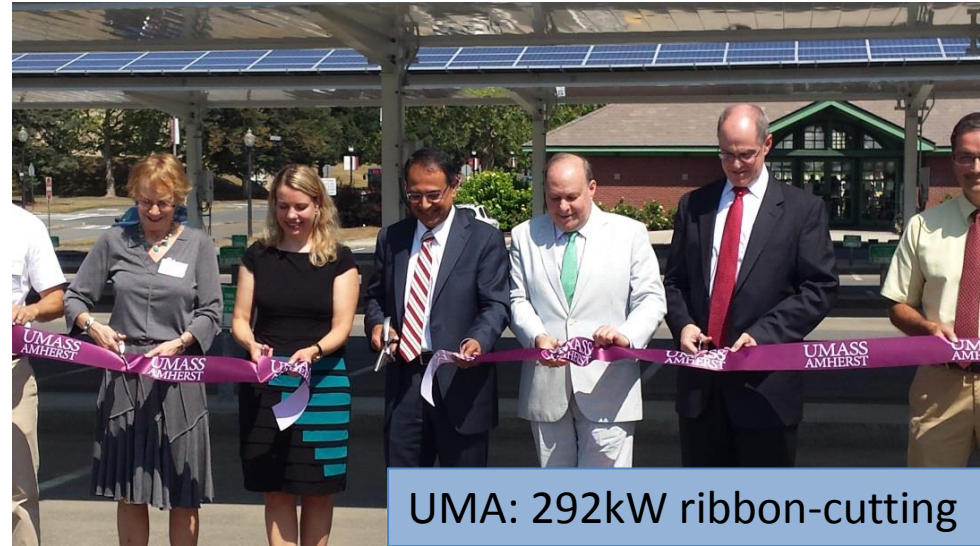
Date:	September 23, 2016 from 10:00 AM – 12:00 PM
Location:	Morris Auditorium
	Federal Reserve Building
	600 Atlantic Ave. Boston MA 02210

- The Federal Reserve Building requires a list of all attendees in advance of the meeting, please RSVP by 5:00PM, Tuesday September 20 here:

<https://goo.gl/forms/NI3kARKiRNuTtYT93>

State Solar Project Status

- DCR Walden Pond 105 kW system COMPLETE
- UMass Amherst 292 kw system COMPLETE
- UMass Amherst 5.5 MW in construction
- MassDOT 1.3 MW rights of way in construction
- UMass Lowell 200 kW in design/construction
- Roxbury CC 934 kW in design/construction
- MassDOT 530kW solar Hopkinton in design/construction
- MassDOT 500+kw Worcester in planning



Additional Potential Solar Fiscal Benefits

- Current financial benefits from solar include avoided electricity costs, net metering, SRECs
- New solar program likely to include reduced incentive levels
- LBE researching other possible financial benefits for large scale solar installations
 - Reduction in demand charges
 - Reduction in capacity charges
- Combined solar and storage may maximize benefits
- Complexities in analysis and implementation

Pollinator Updates

'Plant Something for Pollinators' Campaign

- Campaign announced in May by MDAR
- 'MA Pollinator Week' declared in June by Gov. Baker
- Joint program organized by the Massachusetts Flower Growers Association (MFGA) and the Massachusetts Nursery and Landscape Association (MNLA).
- This year's campaign encourages residents to plant at least one pollinator-friendly plant to improve pollinator populations across the Commonwealth.
- **Has your agency/campus (or are there plans) to 'plant something for pollinators'?**

[Press Release](#)

MassWildlife and MassDOT Partnership

- **\$21,500 grant from US Fish & Wildlife Service to MassWildlife** to restore populations of monarch butterflies plus other native and rare pollinating insects
- Goal: increase habitats for pollinating insects by seeding highway median and roadside areas with plants for pollinators
- MassDOT will reduce mowing of seeded areas to once every 2-3 years



Jack Buckley, MassWildlife Director
August 24th event
Route 3 Rest Area in Plymouth

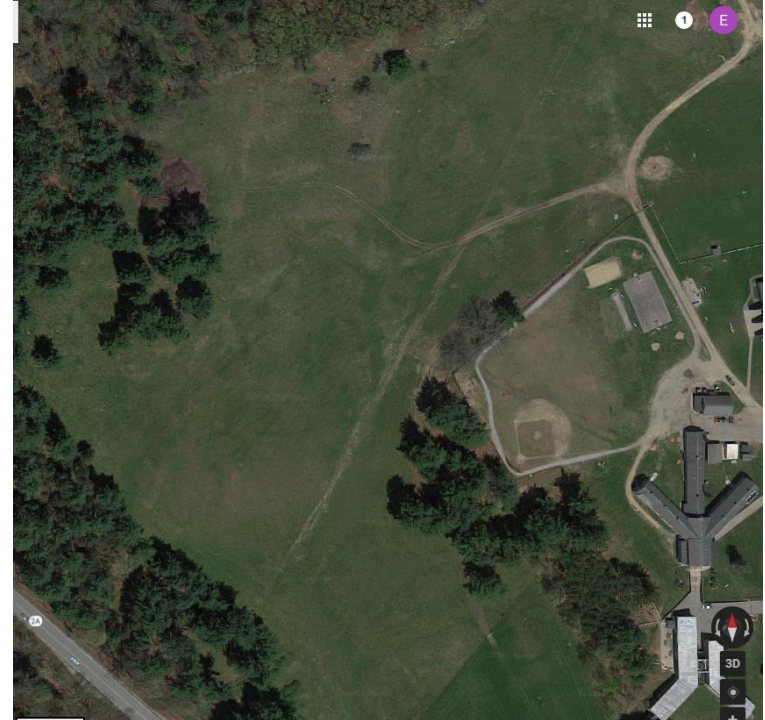
UMass Amherst Pollinator Garden

- Through student interns, established pollinator garden
- Will make available helpful resources
- Minimal financial resources required
- Student labor used to research options, design and prepare site and do plantings
- Positive reaction and high visitation from community



Future Opportunities

- MA DFW and U.S. Fish and Wildlife interested in partnering with us
- Goal to identify additional state lands that can be converted into pollinator habitats

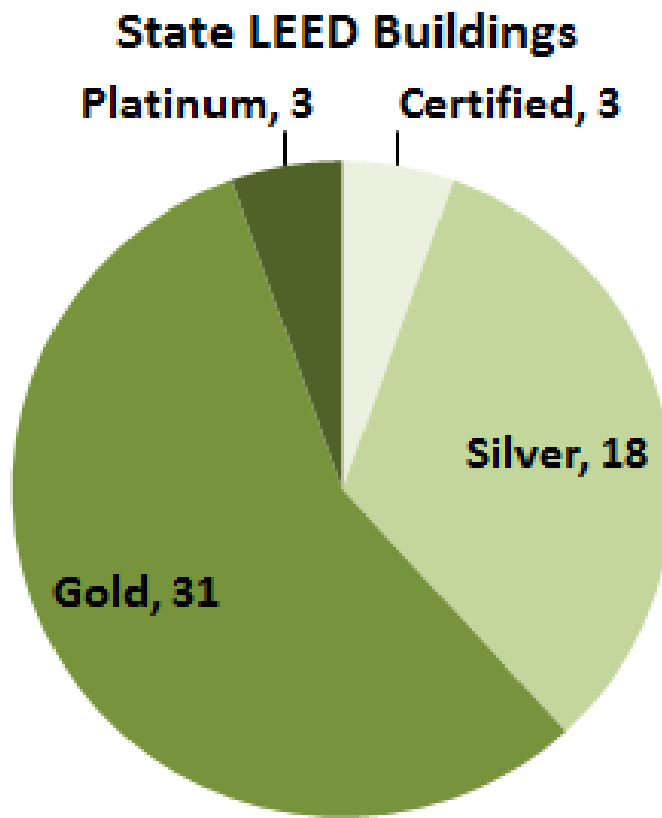


LBE Updates

Staffing Updates

- DOER Emerging Technologies Division
 - Division Director Will Lauwers started in July
- The new Division will lead the policy efforts and programs related to energy storage, clean energy resiliency, electric and alternative transportation, microgrids and other emerging energy technologies

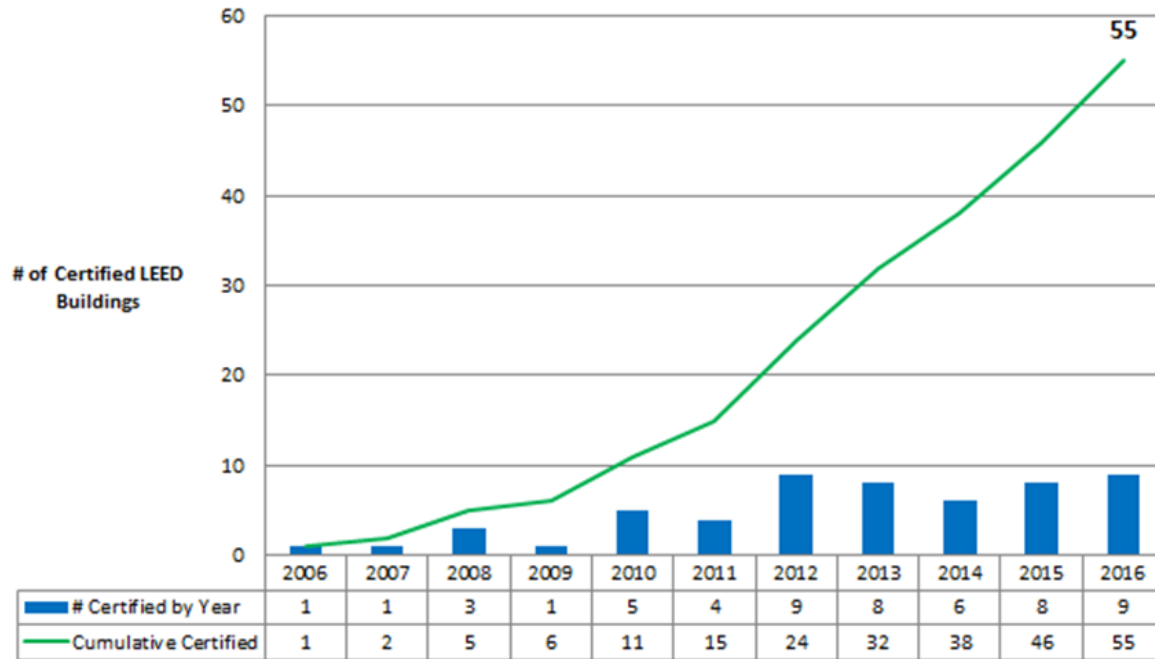
LEED Buildings



55 Certified State Buildings!

Number of LEED Certified Buildings by Year

(through September 1, 2016)



9
Certified
this year
to-date!



Construction Organization	Agency	Project Name	City	Cert Level
DCAMM	Department of Correction	Western MA Regional Women's Correctional Center	Chicopee	Gold
DCAMM	Massachusetts College of Liberal Arts	Feigenbaum Center for Science and Innovation	North Adams	Gold
MCCA	Massachusetts Convention Center Authority	Boston Convention Center & Exhibition Center	Boston	Silver
DCAMM	Massachusetts Maritime Academy	Massachusetts Maritime Academy Library Modernization	Buzzards Bay	Platinum
MSCBA	Salem State University	Salem State Gassett Fitness Center	Salem	Silver
DCAMM	UMass Boston	Integrated Sciences Complex	Boston	Gold
DCAMM	UMass Lowell	Health and Social Sciences Bldg	Lowell	Silver
UMass Building Authority	UMass Lowell	University Crossing	Lowell	Silver
UMass Building Authority	UMass Lowell	University Suites	Lowell	Silver

Commonwealth Facility Fund for Energy Efficiency

Overview

- Green Revolving Loan Fund
- **Affordable and self sustaining**, debt is repaid through savings
- **Low-cost financing** mechanism for state agencies to fund energy/water conservation measures (ECMs)
- Target quick payback projects in the **\$10,000 to \$95,000 range**.
- Repayment of 85% of savings per year during payback period

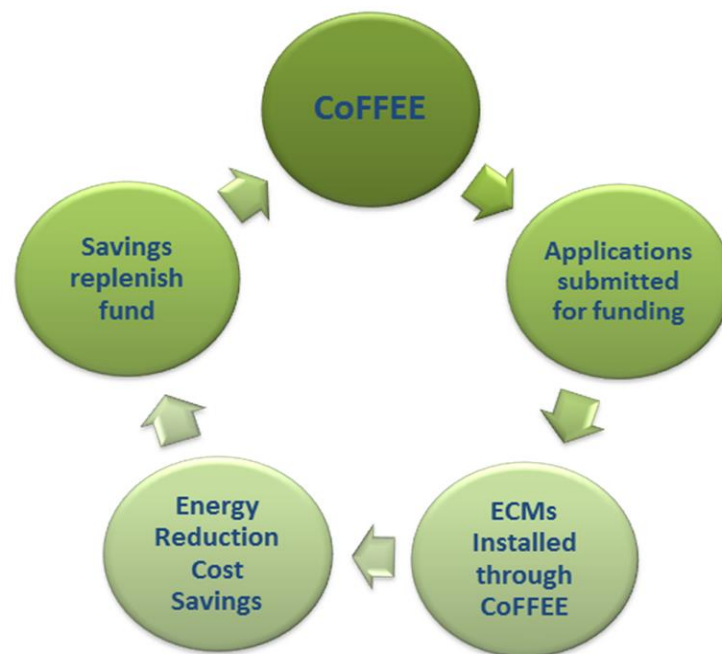
Accepting Applications *now through Nov. 30th*

Please visit: [MASS.GOV/DCAMM/COFFEE](https://www.mass.gov/dcamm/coffee)



Creating A Clean, Affordable and Resilient Energy Future For the Commonwealth

Process



For more information contact:

Ryan Harold, 857-204-1449

Ryan.harold@state.ma.us



Massachusetts Department
of Energy Resources

CoFFEE First Year Highlights

Total Investment - Two Rounds	\$709,000
Total Sites	16
Total Incentives	\$224,858
Estimated Savings over 10 years	\$2,928,620
First Year Saving Cost Savings	\$237,000
Avoided Finance Charges	\$150,000
GHG Emissions Saved	668 tonnes CO ₂
Simple Payback	2.16 years
Savings to Investment Ratio	5.71

2016 LBE Awards Application

- **Application Deadline – one week from today (9/22)**
- Extended to 9/30
- 10th annual awards program for excellence in MA public sector energy and environmental efforts
- Email applications to trey.gowdy@state.ma.us
- More information: [LBE Awards webpage](#)

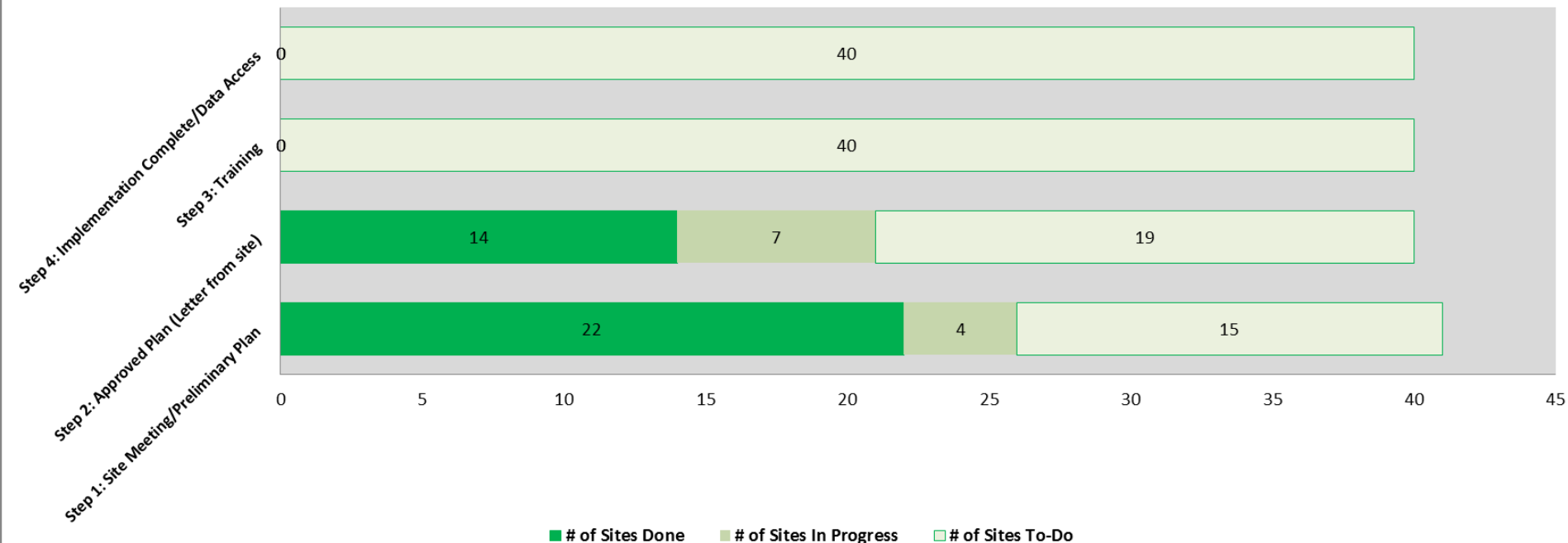
Award Categories:

- State agency/authority
- Public higher education
 - Municipalities
 - Individual awards (state and municipal)

CBEI Updates

- DCAMM (in partnership with DOER) continuing to:
 - reach out and schedule introductory site meetings, develop site plans, prepare for trainings
- CBEI Advisory Council expected to meet in November
- Savings opportunities identified – DCAMM has/will reach out
- Contact krista.lillis@state.ma.us with questions/be added to Council

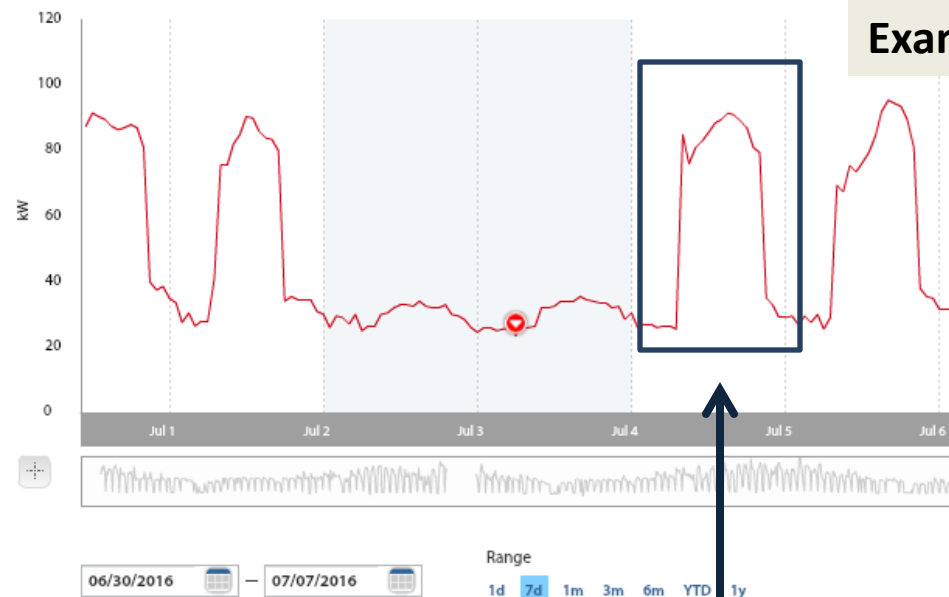
CBEI Site-by-Site Implementation Status



CBEI Holiday Shutdown Outreach – Labor Day 2016

1. Sites that operated on previous holiday (July 4th) identified
2. Commonwealth outreach to 3 state sites (total of 5 buildings) with reminder to check holiday schedules
3. Commonwealth review of data to confirm holiday shutdown
4. Next steps: quantify savings and identify priorities ahead of next holiday shutdown (Columbus Day)

Example site



July 4th –
Building Operated



Labor Day –
Building Did Not Operate

High-Efficiency Lighting Swap-out Program

- No-cost bulb swap-out via six FAC76 bulb distributor
 - LEDs to replace CFLs in recessed cans
 - 2 and 4 pin bulbs
- ‘Upstream program’ in partnership with Program Administrators (PAs) Cape Light Compact, EVERSOURCE, National Grid, and Unitil
- Contact Charlie Tuttle (charles.tuttle@state.ma.us) with questions



Photo: [US DOE](#)

Dates -2016	Task
September 12	Program Kickoff: Notice published in DOER Webpages and massmail outreach to agencies, schools, and municipalities
October 21	Request Form Submittal Deadline by 10/21/2016
November 15	Order fulfillment/shipment deadline Bulbs must be delivered to end users no later than 11/15/2016
December 15	Lamp installation deadline Agencies/Schools/Municipalities must install all bulbs no later than 12/15/2016

LBE Grant Program

- LBE launching \$30 million in grant programs over next 5 years
- Goal is to support LBE priorities:
 - Solar Canopies
 - Green Fleets
 - Renewable Thermal
 - Resiliency and Storage
 - High Performance Buildings
 - Innovation

Upcoming Grants

- Comprehensive Feasibility Studies:
 - Renewable thermal
 - Resiliency and storage
 - Solar
 - Other potential clean energy
 - Release fall 2016
- Green Fleet:
 - For executive branch agencies and fleets acquiring vehicles through OVM
 - Eligible technologies: after market hybrid and alternative fuel conversions, hybrids vehicles
 - Release Fall 2016
- Solar Canopy and Renewable Thermal implementation grants to follow in Winter

LBE Outreach Materials Review

Top 10 Tips/Ideas

Ideas

Top 10...

- Water Conservation Tips
- Event Waste Minimization & Recycling Tips
- Alternative Transportation Tips
- Environmentally Preferable Purchasing Tips
- Efficient Building Operations Tips
- Energy & Sustainability Opportunities in MA (*e.g. MassSave, MOR-EV*)


Creating A Clean, Affordable and Resilient Energy

Commonwealth of Massachusetts
LEADING BY EXAMPLE PROGRAM

TOP 10 LOW AND NO COST ENERGY REDUCTION TIPS

Here are a few simple things that *you and your facility* can do to *lead by example* to reduce energy use and costs:

1. Replace incandescent bulbs with LEDs, which use up to 80% less energy and last up significantly longer than incandescent bulbs
2. Install lighting motion sensors in restrooms, kitchens, and conference rooms
3. Require ENERGY STAR office equipment procurement, including computers, monitors, copiers, and printers. Equipment will shut down after periods of inactivity, providing significant energy savings
4. Enable (and regularly check) computer power management settings
5. Implement and regularly verify your building shutdown schedule to reduce off-peak energy use during evenings, holidays, and weekends
6. Use and/or distribute advanced power strips with timers, motion sensors, and/or remote control capabilities to reduce plug-loads and energy costs
7. Initiate a regular maintenance program that includes equipment inspections, filter replacements, and correction of system overrides for maximum efficiency
8. Conduct a nighttime energy audit to find out if equipment is on after-hours
9. Remind staff to turn off equipment/appliances during periods of non-use
10. Sign up for a demand response program to potentially receive financial payments for reducing electrical consumption during peak periods



Resources:

- For LED bulbs or other efficiency products, see [statewide contract FAC76](#)
- Find Environmentally Preferable Products (EPP), by using the [EPP Program Guide](#)
- For more efficiency and cost-saving tips, check out this [ENERGY STAR resource](#)
- Find out more about Demand Response opportunities from [DCAMM](#)

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS – DEPARTMENT OF ENERGY RESOURCES
www.mass.gov/eea/leadingbyexample

Events & Next Meeting

- DCR Walden Pond Visitor Center Ribbon Cutting 9/27



*Architect Rendering,
[DCR Website](#)*

- CURC Webinar: Beyond Composting – Campus Food Recovery Programs 10/20
- Next LBE meeting November 1, Site TBD